

IN THE ABSTRACT:

Please add the following Abstract of the Disclosure:

ABSTRACT OF THE DISCLOSURE

The invention relates to a tubular reactor for carrying out catalytic gas-phase reactions, containing a catalyst tube bundle (8) that is traversed by the relevant reaction gas mixture, is filled with a catalyst, extends between two tube sheets (4, 148) and around which flows a heat transfer medium contained within a surrounding reactor jacket (6).

The reactor also comprises gas entry and discharge hoods (2; 60) that cover the two tube sheets for supplying the relevant process gas to the catalyst tubes and for discharging the reacted process gas from the catalyst tubes.

Together with all the parts that come into contact with the process gas mixture, the reactor is designed to have an appropriate strength for withstanding the deflagration and explosive pressures that are to be taken into account during its operation. The volume available to the process gas mixture prior to its entry into the catalyst tubes is restricted as much as possible in construction and flow engineering terms.